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### PUBLICATION OF THE GRADUATE SCHOOL OF BUSINESS ADMINISTRATION, HARVARD UNIVERSITY

VOL. VI. NO. 2

CAMBRIDGE, MASS.

JUNE, 1920

### BULLETIN NO. 19 BUREAU OF BUSINESS RESEARCH

# Operating Expenses in the Wholesale Grocery Business in 1919



PRICE \$1.00

CAMBRIDGE HARVARD UNIVERSITY PRESS 1920

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# OPERATING EXPENSES IN THE WHOLESALE GROCERY BUSINESS IN 1919

The operating expenses of one hundred fifty-nine wholesale grocers in 1919 are summarized in this bulletin. These wholesale grocers were located in forty states and Canada. Incomplete reports were received from a number of other wholesale grocers. Inasmuch as their figures could not be adjusted exactly to the standard accounting system, they were not included in these tabulations. Of the one hundred fifty-nine reports used in preparing this bulletin, one hundred twenty-seven were from wholesale grocers who had coöperated in some previous year, and eighty-eight were from grocers who furnished reports for both 1918 and 1919.

#### VOLUME OF BUSINESS

The following table shows the volume of business of the wholesale grocers whose figures were used in compiling the summary of operating expenses.

Annual sales	Number of firms
\$100,000-499,000	
500,000-999,000	
1,000,000–1,499,000	42
1,500,000-1,999,000	
2,000,000-2,499,000	
2,500,000–2,999,000	
3,000,000 and over	19

The volume of annual sales in these businesses ranged from \$144,000 to \$24,800,000.

Among the reports received from wholesale grocers for the years 1918 and 1919, all but six showed an increase in net sales in 1919 over 1918. These six showed a decrease in their sales in 1919, ranging from 5 % to 17 %. Twenty of the firms showed an increase in their sales of less than 10 % in 1919 over 1918; twenty-three an increase between 10% and 19.9%; twenty-one an increase between 20% and 29.9%; and eighteen an increase of 30 % and over. The largest increase in 1919 over 1918 was 58.1%. According to the index figures published by the United States Bureau of Labor Statistics,1 the wholesale prices of food stuffs increased about 13 % during 1919. The increase in the volume of sales in 1919 over 1918 was less than 13 % in two-fifths of the wholesale grocery businesses reporting for both years. Thus, two-fifths of the wholesale grocers who reported apparently did not sell a larger quantity of merchandise in 1919 inasmuch as their sales did not increase in value more than the relative increase in the wholesale prices of food stuffs.

#### OPERATING EXPENSES

The following table gives the lowest, highest, and common figure for each item of expense in 1919. Each figure in this table is a percentage of net sales. Net sales, as explained in the standard accounting system, are the gross sales of the business less returns and allowances to customers, less prepaid freight, express, and parcel postage collected from customers, and less cash discounts taken by customers. The figure for net sales thus represents the real volume of business done and serves as the basis of comparison.

The common figure is the one that ordinarily is most useful for purposes of comparison. It is the most representative and most typical figure. For each item the common figure is de-

<sup>&</sup>lt;sup>1</sup> Monthly Labor Review, February, 1920, page 83.

termined from a careful classification and tabulation which indicates what is known as the mode, or the point around which the figures tend to concentrate in greatest numbers without being influenced by the figures at the extremes. The figures in this table are the summary of the reports from one hundred fifty-nine wholesale grocers for the year 1919.

#### Operating Expenses in the Wholesale Grocery Business in 1919

#### Net Sales = 100%

1100 Dates - 100 /6	1100 54103 - 100 /6			
	Lowest	Highest	Common	
Total Salesforce Expense	0.34 %	4.12 %	2.2%	
Advertising	0.01	0.36	0.03	
Other Selling Expense	0.01	0.63	0.07	
Total Selling Expense	0.39	4.26	2.4	
Salaries and Wages of Receiving, Ware-				
house, and Shipping Force	0.33	2.75	1.1	
Packing Cases and Wrappings	0.01	0.48	0.04	
Outward Freight, Express, Parcel Postage,				
and Cartage	0.01	3.71	0.4	
Total Receiving, Handling, and Shipping				
Expense	0.75	5.33	1.6	
Executive Salaries (including Buying)	0.21	2.55	0.8	
Office Salaries	0.26	1.81	0.7	
Postage and Office Supplies	0.02	0.41	0.17	
Telephone and Telegraph	0.01	0.21	0.04	
Credit and Collection Expense	0.01	0.37	0.03	
Other Management and Buying Expense.	0.01	0.79	0.1	
Total General Management and Buying				
Expense	0.93	3.6	2.0	
Rent	0.11	0.73	0.3	
Heat, Light, and Power	0.01	0.3	0.05	
Taxes (except on buildings, income, and				
profits)	0.01	0.67	0.2	
Insurance (except on buildings)	0.02	0.36	0.15	
Repairs of Equipment	0.01	0.36	0.04	
Depreciation of Equipment	0.01	0.74	0.13	
Total Interest	0.34	2.73	1.6	
Total Fixed Charges and Upkeep Expense	0.9	4.32	2.6	
Miscellaneous Expense	0.01	0.71	0.2	
Losses from Bad Debts	0.01	0.9	0.15	
Total Expense	4.35	14.71	9.1	

#### TOTAL EXPENSE

The common figure for total expense in 1919 was 9.1% of net sales. Total expense includes expenditures for such items as wages of salesforce, travelling expense, postage, taxes, and so on; it also includes a charge for a fair salary for the proprietor or each partner, rent of offices and warehouse, whether leased or owned, and interest both on borrowed capital and on the proprietor's net investment.

A comparison of the figures of seventy wholesale grocers, from whom reports that were comparable for total expense were received for both 1918 and 1919, showed that the common figure for total expense was practically the same in both years. There was no increase in total expense in percentage of net sales in 1919 over 1918.

#### SALESFORCE EXPENSE

This expense includes salaries and wages of salesforce, commissions paid to the salesforce, and salesmen's travelling expenses. The common figure for total salesforce expense in 1919 was 2.2% of net sales. The statements from eighty-one wholesale grocers who reported their salesforce expense for both 1918 and 1919 showed that the ratio of salesforce expense to net sales was practically the same in these businesses in both years.

#### OTHER EXPENSES

For the other expenses the common figures were also approximately the same in 1919 as in 1918. It is to be noted, however, that there was a slight decline in the expense for losses from bad debts for which the common figure in 1919 was 0.15% of net sales. The common figure for losses from bad debts has tended constantly to decline during the last four years in the wholesale grocery businesses from which the Bureau has received reports. This is to be accounted for primarily by the general prosperity of the country.

#### GROSS AND NET PROFIT

The following statement shows the range and the common figures for gross and net profit in the statements of the one hundred fifty-nine wholesale grocery businesses used in the preparation of this summary.

		Highest	Lowest	Common
Gross Profit		18.0%	4.42 %	11.1 %
Net Profit (or Loss)	Profit	5.53	Loss~2.47	Profit 1.9

Gross profit is found by deducting the cost of the merchandise sold from net sales. Net profit is found by deducting total expense from gross profit. Thus, net profit is the residual amount that remains after accounting for the merchandise sold and for the total expense of operating the business.

The common figure for gross profit in 1919 was 11.1% of net sales. A comparison of the figures of eighty-four whole-sale grocers who furnished comparable statements for 1918 and 1919 indicated that the common figure for gross profit in these businesses in 1919 was about three-tenths of one per cent higher than in 1918.

The common figure for net profit in 1919 was 1.9% of net sales. A comparison of the businesses reporting for both years

<sup>&</sup>lt;sup>1</sup> The Bureau believes that from all points of view it is desirable that a distinction be made between interest and profit. It is granted by those who consider interest and net profit as synonymous that the proprietor of a business rightfully expects the business to yield him something more than the salary which he could earn if employed by another, rent on his realty, and interest on his capital. It is this additional profit which induces him to engage in business on his own account. It compensates him for his own proficiency in organizing and managing the business and for the extra risks which he incurs as proprietor and investor. The "profit" earned in one year counterbalances the loss of another year; and, considering the industry as a whole, the "profit" earned by one business counterbalances losses incurred by others of the same sort. (Bulletin No. 8, System of Operating Accounts for Wholesale Grocers, page 35.)

indicated that net profit was about one-fourth of one per cent higher in percentage of net sales in 1919 than in 1918.

The wholesale grocer who showed the lowest gross profit in 1919 also had the lowest total expense in percentage of net sales; the company with the highest gross profit had the highest total expense. Although such adjustment does not appear in every case, nevertheless the tendency clearly is for wholesale grocers to adjust their mark-ups and their gross profits in accordance with the expenses that they incur.

#### STOCK-TURN

The rate of stock-turn has been determined by dividing the cost of the merchandise sold during the year by the average of the inventories of merchandise at the beginning and end of the year. Had monthly inventory figures been available, their average divided into the cost of goods sold would have given a more accurate figure for stock-turn. With monthly inventories the seasonal fluctuations in the amount of merchandise carried would be taken into account. The seasonal fluctuations, however, are presumably much the same throughout the wholesale grocery trade, so that the method of determining stock-turn used here gives figures that have significance for purposes of comparison.

The lowest rate of stock-turn reported in the wholesale grocery business in 1919 was 2.2 times a year; the highest was 14.6 times; and the common figure was 5.2 times. While the common figure for the rate of stock-turn in 1919 was 5.2 times a year, nevertheless enough firms were turning their stock more than six times a year to indicate that a faster rate is readily obtainable in a majority of the wholesale grocery businesses.

A comparison of the reports from identical businesses for the two years indicated that the rate of stock-turn was the same in 1919 as in 1918. It is furthermore significant that the same firm showed the highest rate of stock-turn in both 1918 and 1919. Although in this particular case the 1919 figure is lower than the figure for the previous year, the fact that the same firm had the highest rate of stock-turn in two consecutive years indicates that it was not accidental but presumably the result of careful buying and good management.

In 1919 the wholesale grocers who turned their stock more than six times a year showed a common figure for total expense of  $8.3\,\%$  of net sales. Wholesale grocers who turned their stock less than 4.5 times a year showed a common figure for total expense of  $9.8\,\%$  of net sales. In other words, the firms that were turning their stock more rapidly were able to make a substantial reduction in their ratio of total expense to net sales.

#### INVENTORY

In one hundred forty-eight wholesale grocery businesses the average inventory of merchandise January 1, 1919, was \$257,642. In the same businesses the average inventory of merchandise January 1, 1920, was \$287,270. Thus, the average investment in merchandise was 11.5% more January 1, 1920, than it was January 1, 1919. This corresponds approximately to the increase in prices of food stuffs, as shown by the index number of the United States Department of Labor. While the value of the merchandise on hand January 1, 1920, was higher than in the previous year, these figures indicate that the quantity was practically the same. This conclusion is substantiated by the fact that the average rate of stock-turn was the same in 1919 as in the previous year.

#### BUYING

On the schedule sent out to the Bureau's coöperators, an inquiry was made this year regarding the goods purchased from brokers. Sixty-two wholesale grocers stated that they

bought merchandise from brokers. Only one wholesale grocer replied that he did not buy any merchandise from brokers, and the remainder did not answer the question. Of the sixty-two wholesale grocers who stated that they bought merchandise from brokers, eight purchased less than 25% of their goods from this source; eight purchased 25–45%; nine purchased 50%; nine purchased 60–65%; fourteen bought 70–75%; and fourteen bought 80% or more of their merchandise from brokers. Thus, three-fourths of the wholesale grocers replying to the question stated that they were buying 50% or more of their goods from merchandise brokers. Although these figures are only rough estimates, they nevertheless furnish some idea of the position which the merchandise broker holds in the grocery trade.

The goods most generally bought from brokers, according to these reports, are canned goods, sugar, and dried fruit. Other merchandise purchased in part from this source includes cereals, coffee, flour, and a general line of groceries.

Twenty-one of these firms stated that they also sold some merchandise through brokers. These firms had a large volume of business; fifty per cent had net sales of more than \$1,600,000 in 1919. Nine of the firms selling to brokers also manufactured or packed goods. Aside from these firms that manufactured or packed part of the products that they sold, the wholesale grocers selling through brokers generally used this outlet for the disposal of surplus stock only. The brokerage fee is universally 2% of the sales.

#### SELLING

#### Number of Customers

An inquiry was made regarding the number of retailers to whom each wholesale grocer sold regularly. One hundred one replies were received to this question. One wholesaler stated that he sold regularly to seventy-five retailers. For thirtytwo wholesale grocers the number of retailers to whom each sold regularly ranged from 100 to 499; for thirty-one wholesalers, from 500 to 999; for thirty-seven wholesalers, 1,000 retailers and over. The largest number of retailers reported by any firm as regular customers was 12,000. The common figure for the number of retailers to whom each of these wholesale grocers sold regularly was 700.

The volume of total sales varied directly with the number of retailers who were regular customers of each firm. The average annual sales per retailer in these businesses was \$1400. Here again these figures are rough approximations, especially because some wholesalers sell to others than retailers, but the figures furnish a clue to the average volume of sales that a wholesale grocer normally makes to each retailer to whom he sells regularly.

A comparison of salesforce expense with the average sales to each retailer indicated that, in the wholesale grocery businesses in which the average sales per retailer were below \$1,000 a year, the common figure for salesforce expense was 2.6% of net sales. In those businesses in which the average sales per retailer were from \$1,000 to \$2,000 during the year, the common figure for salesforce expense was 2.1% of net sales, and in those businesses with a high volume of sales per customer the average figure for salesforce expense was less than 2% of net sales. This indicates clearly the saving that is accomplished by securing a large average volume of sales to each customer.

#### Broken Package Room

Seventy-one wholesale grocers stated that they had a broken package room. Twenty-nine stated that they did not have a broken package room. The firms reporting that they were not operating a broken package room generally had a volume of sales less than \$1,000,000 in 1919. Three-fourths of the firms that were operating a broken package room,

on the other hand, had sales of more than \$1,000,000 each in 1919. The expense for wages of receiving, handling, and shipping force was slightly higher in the case of firms operating a broken package room than for those firms that did not follow this policy. The difference in total receiving, handling, and shipping expense between these two groups was about one-fourth of one per cent of net sales. The number of employees in a broken package room was generally one or two. The largest number was twenty-one, but only two firms had more than five each.

A comparison of the rate of stock-turn in these two groups of businesses was made, but it did not show conclusively that there is a substantial difference in the rate of stock-turn whether or not a broken package room is operated. Numerous firms operating a broken package room had a high rate of stock-turn, and it appears that other policies of management have more to do with the rate of stock-turn than the policy toward the operation of a broken package room.

#### DELIVERY

"What percentage of the goods that you sell do you deliver to your customers by your own trucks?" was another question on the schedule. Ninety-four replies to this question were received. The percentage of goods delivered by their own trucks varied from 1% or 2% to 100%. Twenty-eight firms stated that they were delivering from 29% to 25% of their sales by their own trucks. This was the most common practice, Another fairly large group delivered from 40% to 50% with their own trucks.

The expense for outward freight, express, parcel postage, and cartage for firms delivering less than  $25\,\%$  of their sales by their own trucks averaged about  $0.2\,\%$  of net sales. For firms delivering  $50\,\%$  or more of their sales by their own trucks the average expense for outward freight, express, par-

cel postage, and cartage was  $0.5\,\%$  of net sales. In making this comparison it is to be realized that the average volume of sales of the firms delivering less than  $25\,\%$  of their merchandise by their own trucks was substantially larger than the volume of sales of the firms delivering  $50\,\%$  or more. The large firms were selling over a wide territory and therefore found it necessary to ship much of their merchandise by freight. The freight charge is commonly paid by the customer. These figures do not prove in the case of the wholesale grocer who delivered less than one-fourth of his sales by his own truck that the aggregate transportation charges paid by this wholesaler and his customers were less than the aggregate charges where railroad transportation was used.

Seventy per cent of the wholesale grocers delivering by their own trucks made daily deliveries. The majority of the others

made weekly deliveries.

Two wholesale grocers replied that they were making deliveries by their own trucks up to points forty miles distant from their warehouses. Several others were making deliveries within a radius of fifteen to twenty-five miles. The general practice, however, was to make deliveries with trucks within a radius of three or four miles only. Over one-half of the wholesale grocers confined their deliveries to a radius of not more than four miles. The delivery expense in percentage of net sales was higher, as might be expected, the wider the area over which deliveries were made with trucks.

#### FINANCIAL FIGURES

Only 1% of the wholesale grocers from whom reports were received showed current assets less than their current liabilities, January 1, 1920. One-third of the wholesale grocers showed current assets between 1 and 1.9 times their current liabilities. Nearly two-thirds of the wholesale grocers had current assets more than twice their current liabilities. Approxi-

mately one-half of this last group had current assets more than three times their current liabilities.

The relation of accounts and notes receivable to the average monthly sales is a rough index, for comparative purposes, to the policy that is followed with regard to collections in the wholesale grocery trade. Figures were available for the determination of this ratio in one hundred twenty-four wholesale grocery businesses in 1919. The accounts and notes receivable at the end of the year were less than the average monthly sales in thirty of these businesses. In forty they were from 1 to 1.25 times the average monthly sales; in twenty-six, 1.26 to 1.5 times the average monthly sales; and twenty-cight firms showed a ratio of accounts and notes receivable greater than one and one-half times the average monthly sales.

The wholesale grocers who showed accounts receivable less than their average monthly sales were in most cases obviously following a stricter collection policy than the firms with a higher ratio of accounts receivable to sales. A comparison of losses from bad debts and of expense for total interest was made for these two groups. In each instance, the group of wholesale grocers with accounts receivable less than the average monthly sales showed a substantial saving in losses from bad debts and in total interest expense. For both these items combined, the average saving was about four-tenths of one per cent of net sales, a difference that is by no means negligible in a trade that operates on so narrow a margin as the wholesale grocery business.



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